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CLAIMS

What is claimed is:

- 1. A method for making three or four-layer golf ball characterized by which materials for the rubber composition of the golf ball core are blended in set proportions and vulcanized, and then molded in a compression mould under the set temperature for a set period of time; wherein said rubber composition comprises 68% polybutadien rubber, 21% zinc diacrylate, 1.8% titanium dioxide, 0.2% peroxide, and features approximately 2% zinc oxide and 7% barytes; the aforesaid blended and vulcanized materials are molded in a compression mould under 180°C for 120 seconds to form an integral core having a two or three-layer construction with increasing hardness from inside out; subsequently said core is subjected to centerless grinding to obtain the desired dimensions and roundness; finally a cover layer is formed around said core to produce a finished three or four-layer golf ball.
- 2. The method according to claim 1 wherein said core removed from said compression mould is cooled in the air, a construction having two layers of different hardness is produced directly, in which the surface layer has a wall thickness of 2-3 mm and Shore hardness of D60, and the inner layer has a diameter of 32-34mm and Shore hardness of D40.
 - 3. The method according to claim 1 wherein said core removed from said

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compression mould is cooled in the water, a construction having three layers of different hardness is produced directly, in which the surface layer has a wall thickness of 2-3 mm and Shore hardness of D60, the intermediate layer inside said surface layer has a wall thickness of 2-3mm and Shore hardness of D30, and the inner layer inside said intermediate layer has a diameter of 30-32mm and Shore hardness of D15-20.